

Sericea Lespedeza

Background, Life History

Sericea lespedeza (*Lespedeza cuneata*) is a warm season, perennial legume native to eastern Asia. It was first planted in the United States in 1896 by the North Carolina Agricultural Experiment Station. In 1924, seed from Japan was planted at the USDA Experiment Farm near Arlington, Va. Its perceived value for erosion control, livestock forage and to provide wildlife cover was generally accepted when it was introduced into Missouri during the 1930s. However, by 2001, the state of Kansas declared it a noxious weed and other states have programs to eradicate it.

Sericea grows well in places where other plants cannot. It is a nitrogen-fixer, which allows it to persist in poor soils. Found in every county in Missouri, it is tolerant to both droughts and floods. While it prefers full sun, it can survive in partial shade leading to its presence in a wide range of habitats and climates. It is especially found in new and old forest openings, dry upland savannas, roadsides and urban areas.

Sericea's small seed is yellow to red-orange in color. Once scarified and germinated, it grows to a height of 3 to 6 feet. The hairy stems branch at mid-plant, producing trifoliate leaves attached by short petioles. Leaves are club-shaped (wider at the tip than at the base) with a conspicuous point at the tip. The leaflets are green on top and white to light gray-green with silky hairs on the lower surface. One to three white with purple pea-like $\frac{1}{4}$ -inch flowers appear in the upper leaf axils from mid-July to October. Fruit and seeds are produced from October to March. The single-seeded green to tan legume pod is flat ovate to round and is clustered at the terminal axis. Sericea becomes dormant once the seeds drop, and often remains upright. The next year's growth begins at the base, creating dense stands that inhibit growth of other plants.

Impacts

The tannin in this plant makes it unpalatable, resulting in overgrazing of the surrounding native plants, which reduces biodiversity and competition to further sericea growth. Studies have shown that quail forage on this plant, contributing to short-distance dispersal of seeds; however, it does not contain the protein quail need to thrive. Also, chemicals produced by the sericea stunt the growth of surrounding plants.

Sericea has a deep tap root allowing it to out-compete native plants for water and nutrients, especially in times of drought. Increasing its competitiveness are the thousand seeds dropped from each stem, which can remain viable for 20 years or longer.



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Susan Farrington

Each stem may produce a thousand seeds, which can remain viable for 20 years or longer.

The native slender lespedeza, which is often mistaken for sericea, has purple flowers and is not found in large stands.

Control

The best control is early detection followed by spraying all plants with herbicides containing the active ingredient Triclopyr (such as Remedy) or Fluroxypyr (such as Pasturegard). Spray from July to September, after the stem has branched but prior to the production of seed. Hand-pulling or other mechanical methods of control are impractical because of the extensive root system and deep tap root. If not completely removed, the plant will regenerate.

Once sericea lespedeza is established, an integrated approach, such as mowing, burning and spraying, will help minimize the damage to native plants. Due to the plant's extensive seed bank, the same areas will require treatment for several years.

- Mow or burn the field one to three months before applying herbicides.
- Burning in the spring when the plant is dormant will promote the plant's growth and may cause greater densities; however, the plants that are produced afterwards are less vigorous and easier to eradicate with herbicides.
- Burning in the summer may reduce adult vigor, as well as eliminating that year's seeds and decreasing seedling survival.

Replacing Sericea Lespedeza

Once eliminated, you can replace sericea lespedeza with native perennials.

- Slender lespedeza (*Lespedeza virginica*)
- Blue or yellow wild indigo (*Baptisia australis* or *tinctoria*)
- Partridge pea (*Cassia fasciculata*)
- Virginia wild rye (*Elymus virginicus*)
- Little bluestem (*Schizachyrium scoparium*)
- Wild senna (*Senna hebecarpa* or *marilandica*)

For Additional Information

mdc.mo.gov/nathis/exotic/vegman/8257

invasive.org/eastern/srs/CL.html

nps.gov/plants/alien/fact/lecu1.htm

imapinvasives.org/GIST/ESA/esapages/documents/lespcun.pdf

oznet.ksu.edu/sericea/sericeainfo/sericeadescribe/

plants.usda.gov/java/profile?symbol=LECU

www.MissouriConservation.org

For more information or to report a population, contact your local Missouri Department of Conservation office, e-mail WildlifeDivision@mdc.mo.gov, or write:

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